

**Notice of Allowability**

Application No.

09/992,637

Examiner

Robert Stevens

Applicant(s)

KIZHEPAT, GOVIND

Art Unit

2162

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 10/30/07.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 20080108
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20080118
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. The Office has withdrawn all rejections raised in the Non-Final Rejection mailed 7/5/2007.
2. After a thorough search, and in light of the prior art of record, claims 1-33 are allowed.

### ***Reasons For Allowance***

3. The following is an examiner's statement of reasons for allowance:

The present invention is directed to mechanisms for steering data through functional units interconnected by routing units controlled by distribution circuitry that supplies routing control signals in parallel.

The closest prior art, Bartkowiak et al. (US Patent No. 5,771,362), is directed to techniques for implementing a dynamically configurable bus interconnect for routing data between functional units within a processor in response to an instruction field. The further cited reference, Wang et al. (US Patent No. 7,028,134), is directed to techniques for implementing communication circuitry comprised of crossbar integrated circuits which receive data and clock signals over parallel channels.

These references do not disclose a control word distribution circuitry which supplies routing control signals in parallel to a plurality of routing units to establish a route for a cycle.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### **Non-Patent Literature**

Sakr, Majd F., et al., "Reconfigurable Processor Employing Optical Channels", Proc. SPIE – Int. Soc. Opt. Eng., vol. 3490, Brugge, Belgium, Jun. 17-20, 1998, pp. 564-567.

### **Foreign Patent Document**

Mumme et al	EP 0 410 435 A2
Bromley et al	EP 0 456 201 A2

### **US Patent Application Publications**

Kanapathippillai et al	2005/0076194
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### **US Patents**

Lindquist	7,127,590
Hogenauer	6,874,079
Mirsky	6,226,735
Morton	6,088,783
Ebeling et al	6,023,742
Leiserson et al	5,388,214
Zak et al	5,265,207
Kuszmaul et al	5,680,550
Grondalski	5,146,606
Hillis	5,212,773
Hillis	5,151,996
Morton	5,822,606
Mumme	5,379,444
DeLano	5,617,549
Bromley	5,247,613
Goshorn et al	3,487,370

*Contact Information*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert Stevens  
Examiner  
Art Unit 2162

January 9, 2008



JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100